

FIG. 1a

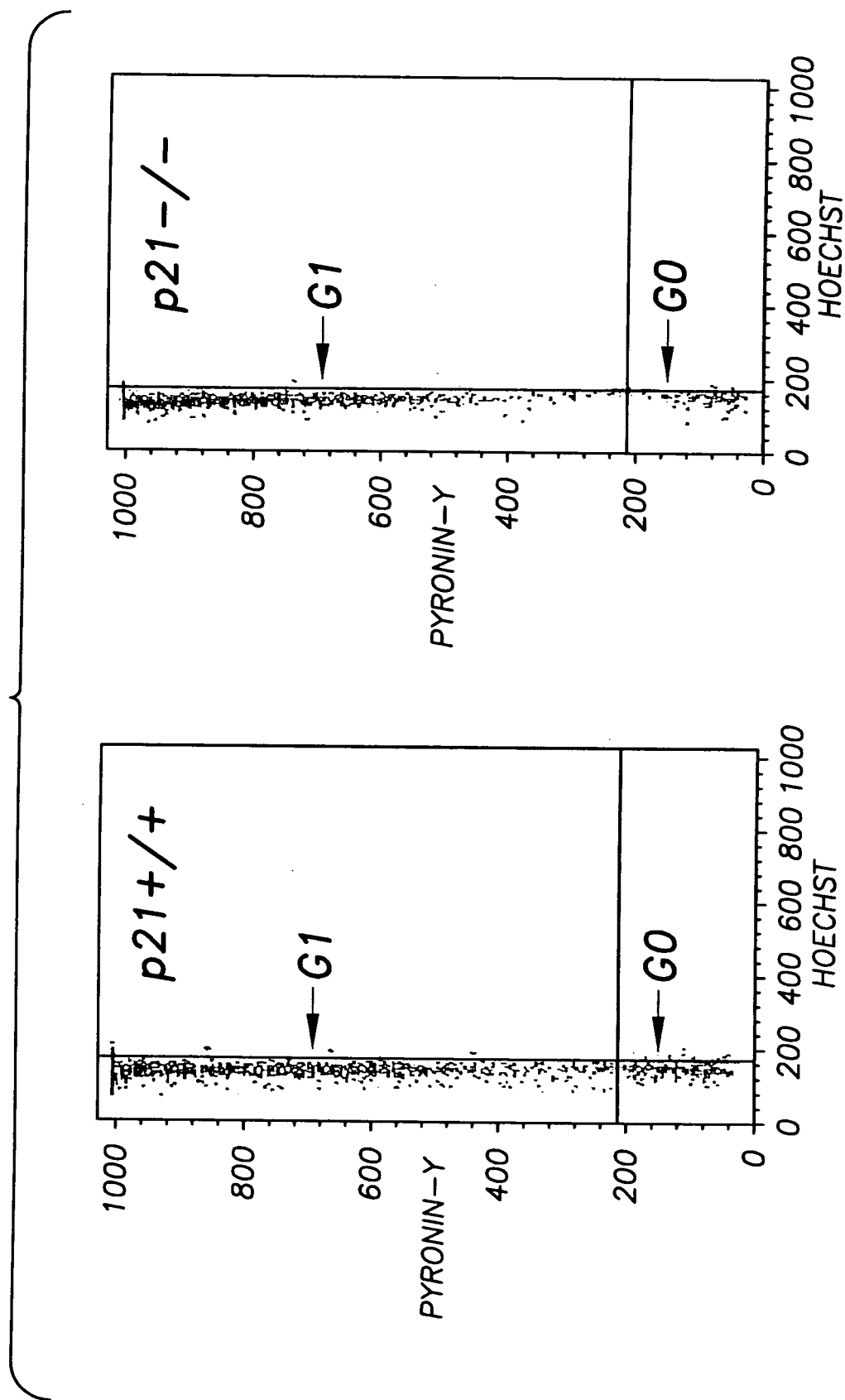
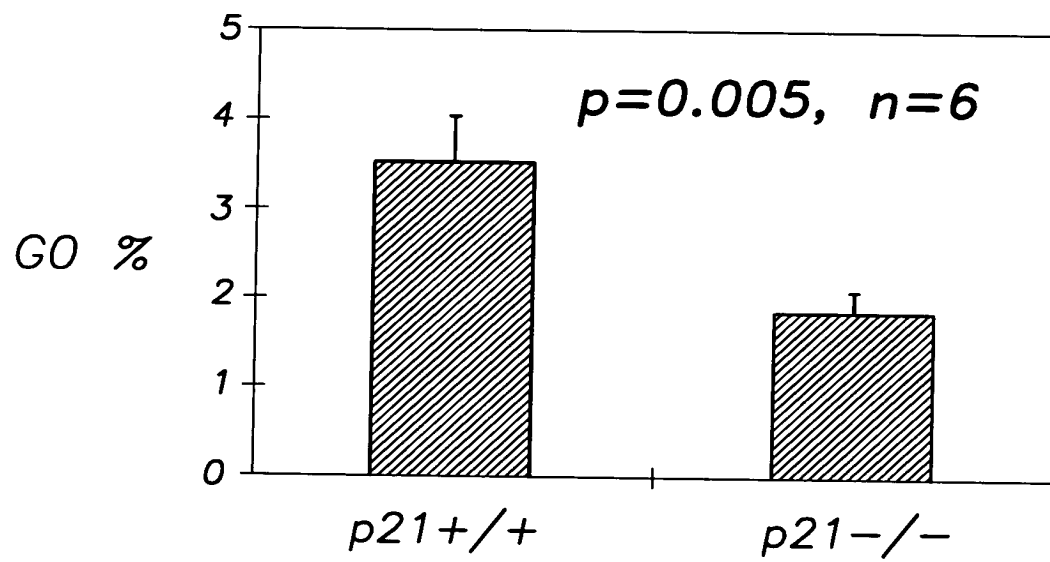


FIG. 1b



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FIG.2a

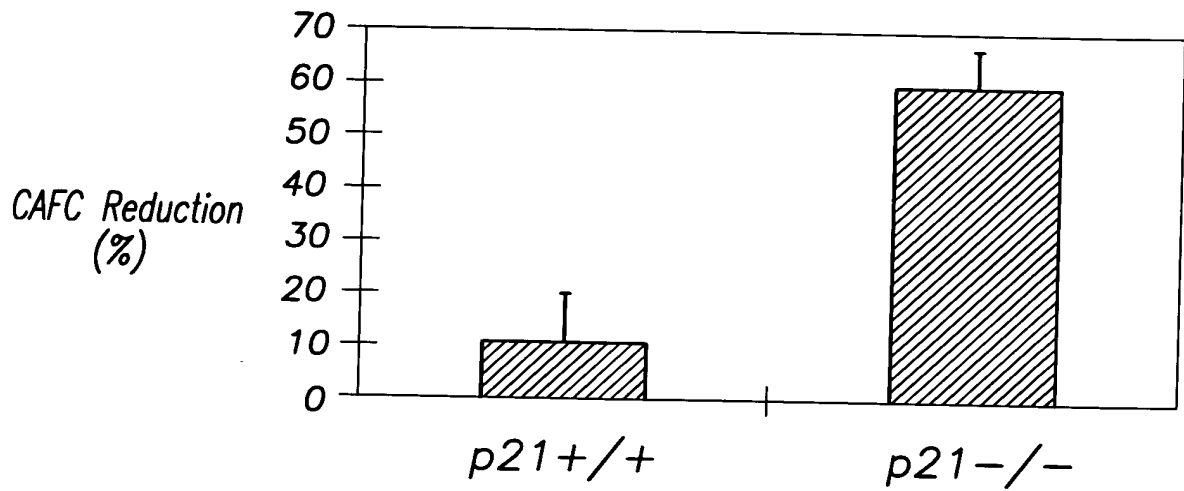


FIG.2b

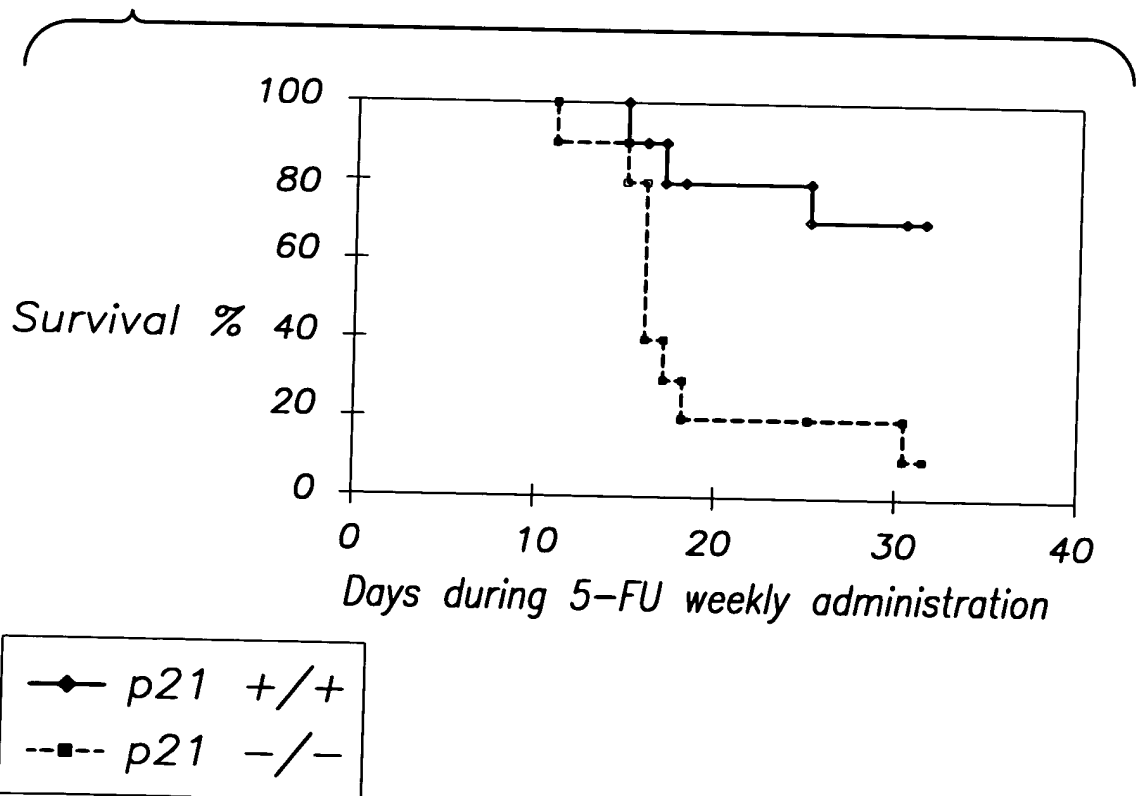


FIG.3a

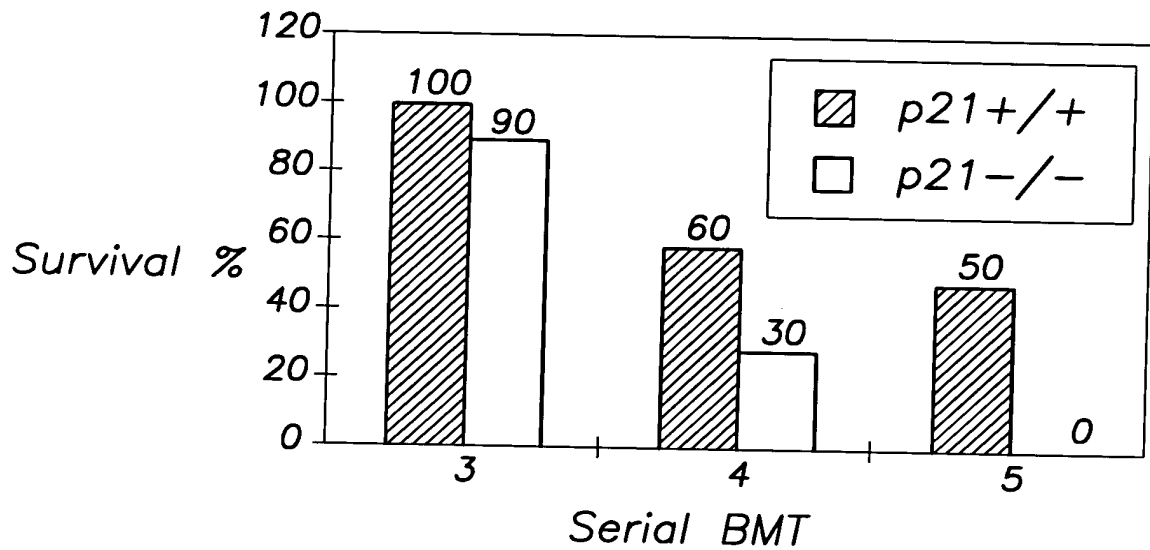


FIG.3b

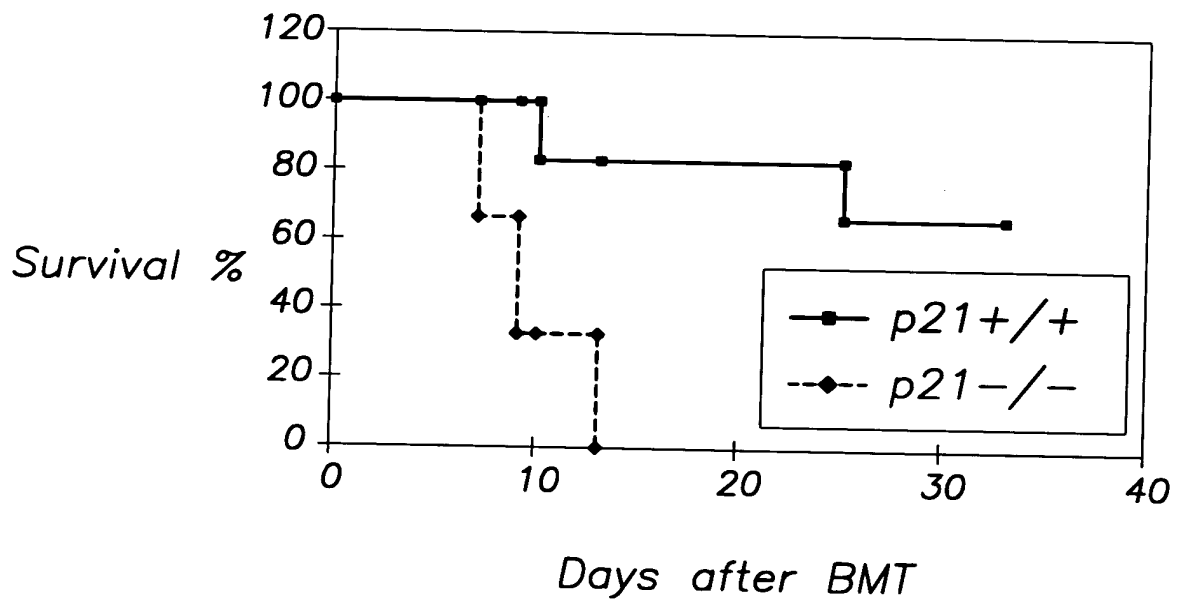


FIG. 3c

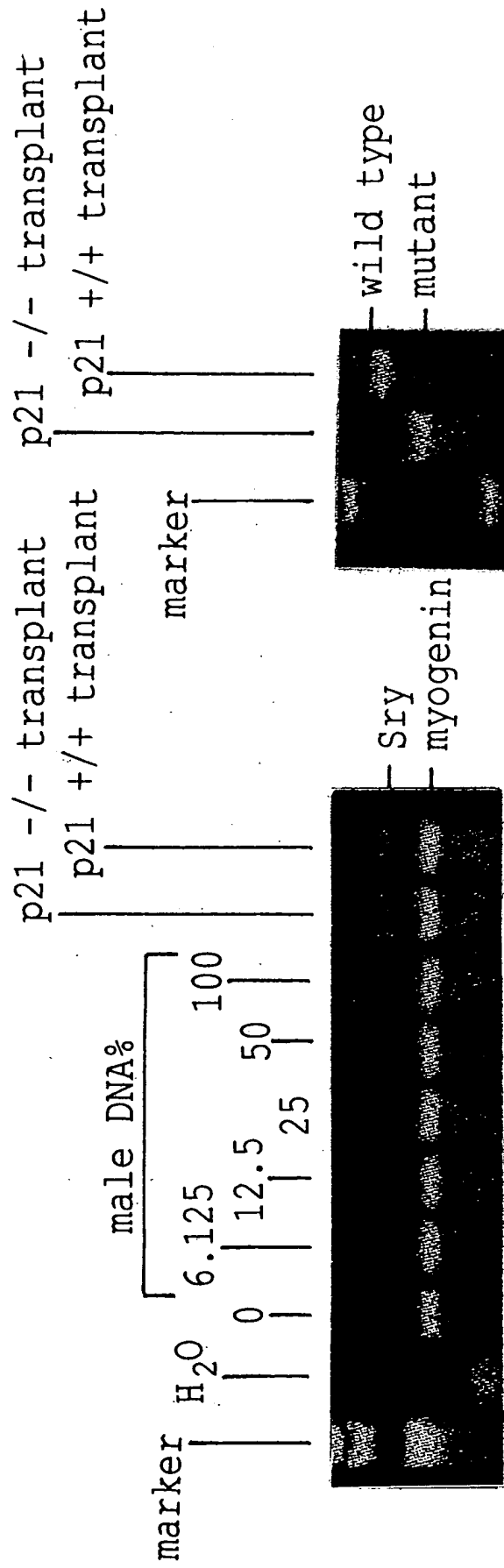
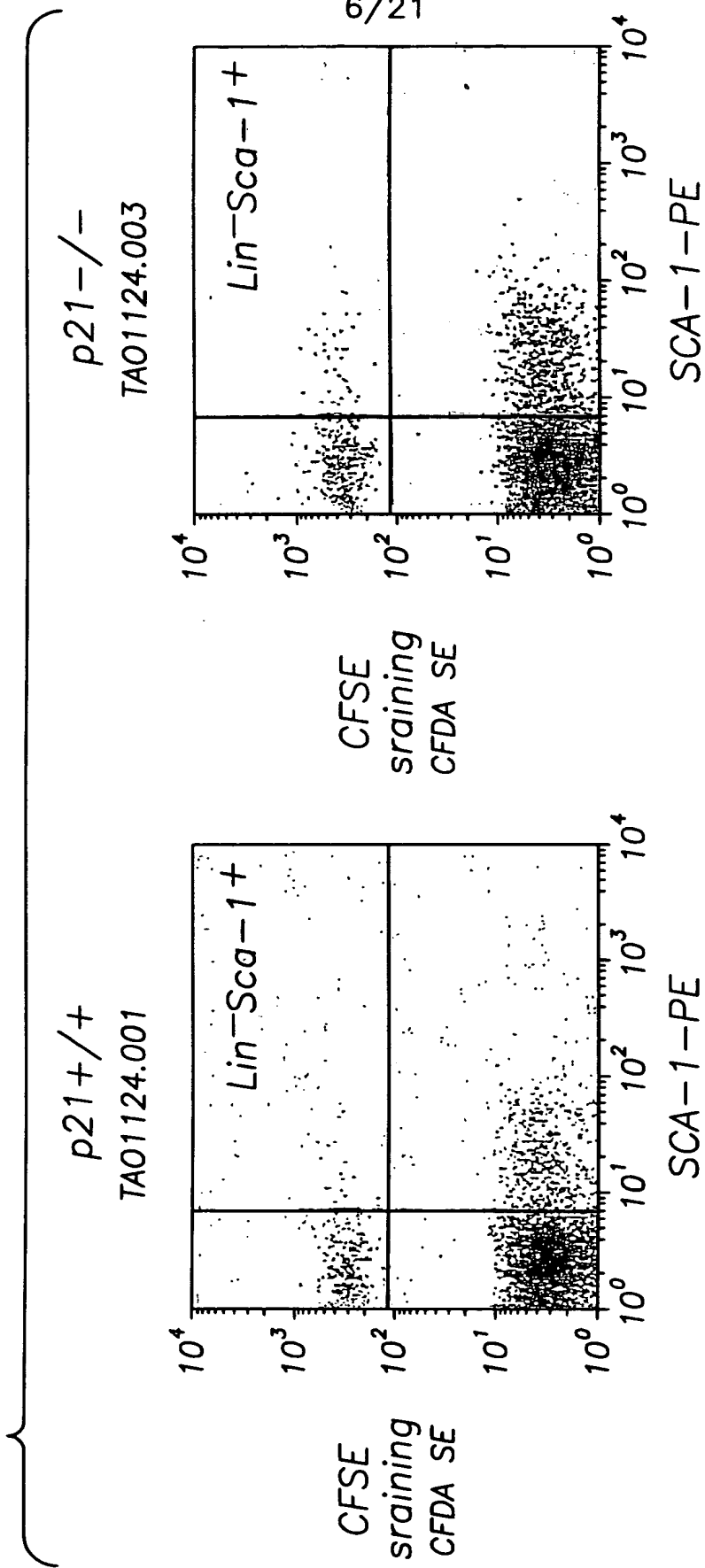


FIG. 4



Sca-1 staining

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FIG.5a

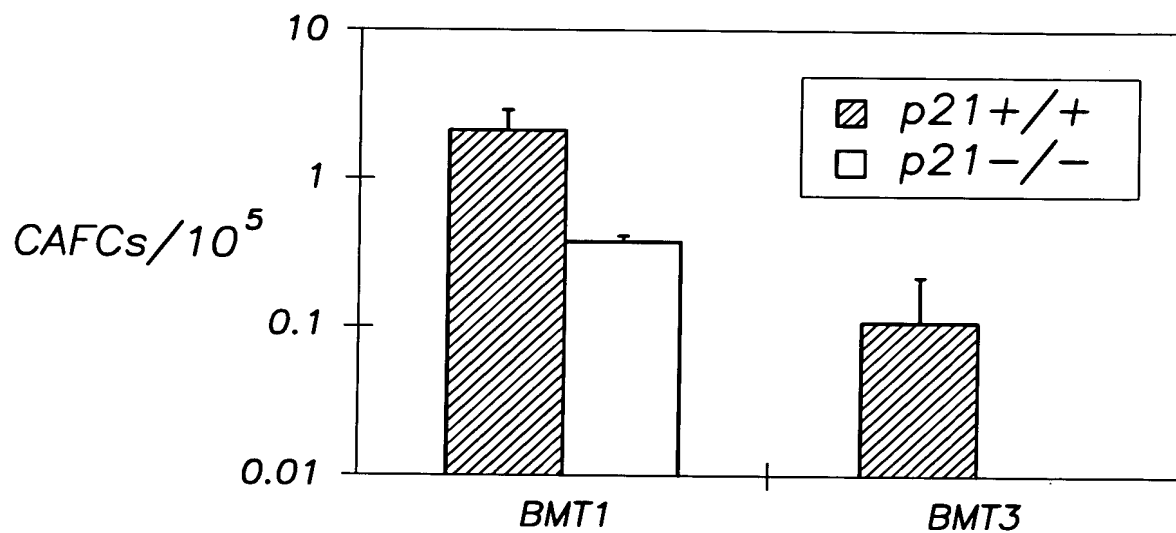


FIG.5b

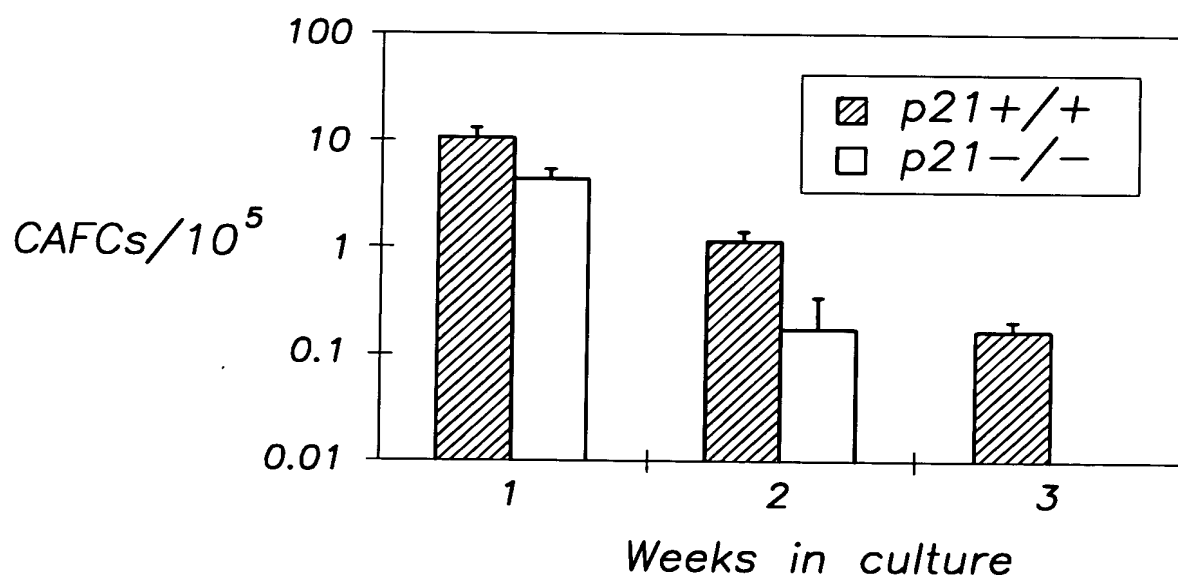


FIG. 6a

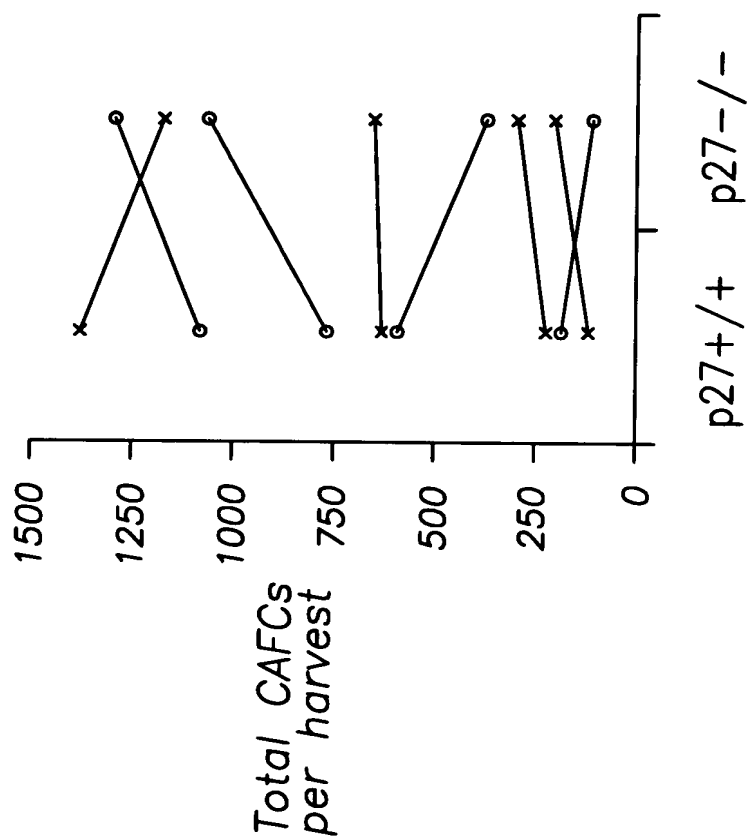
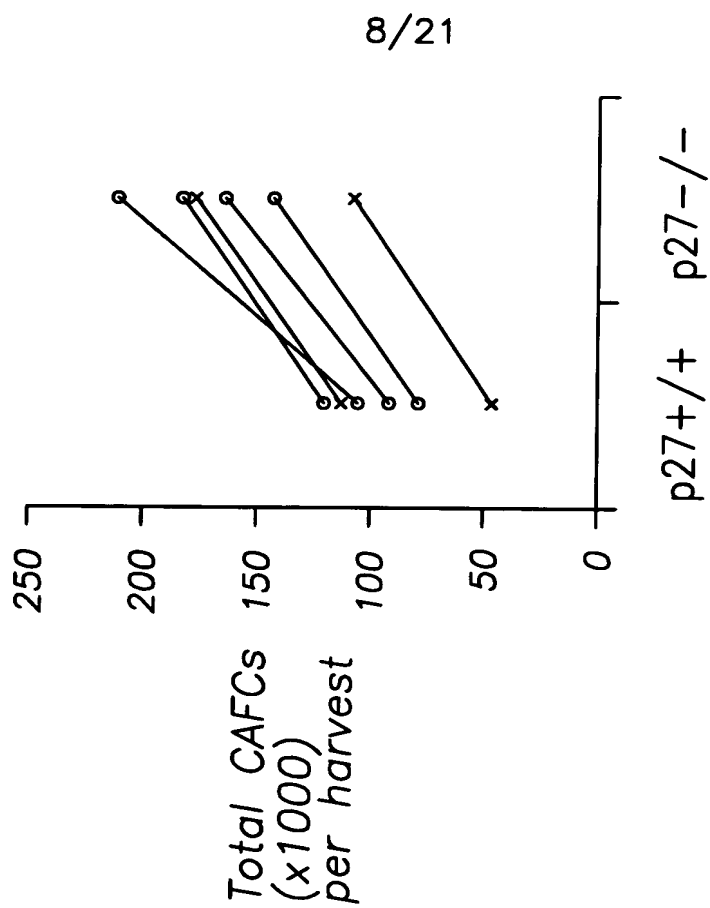
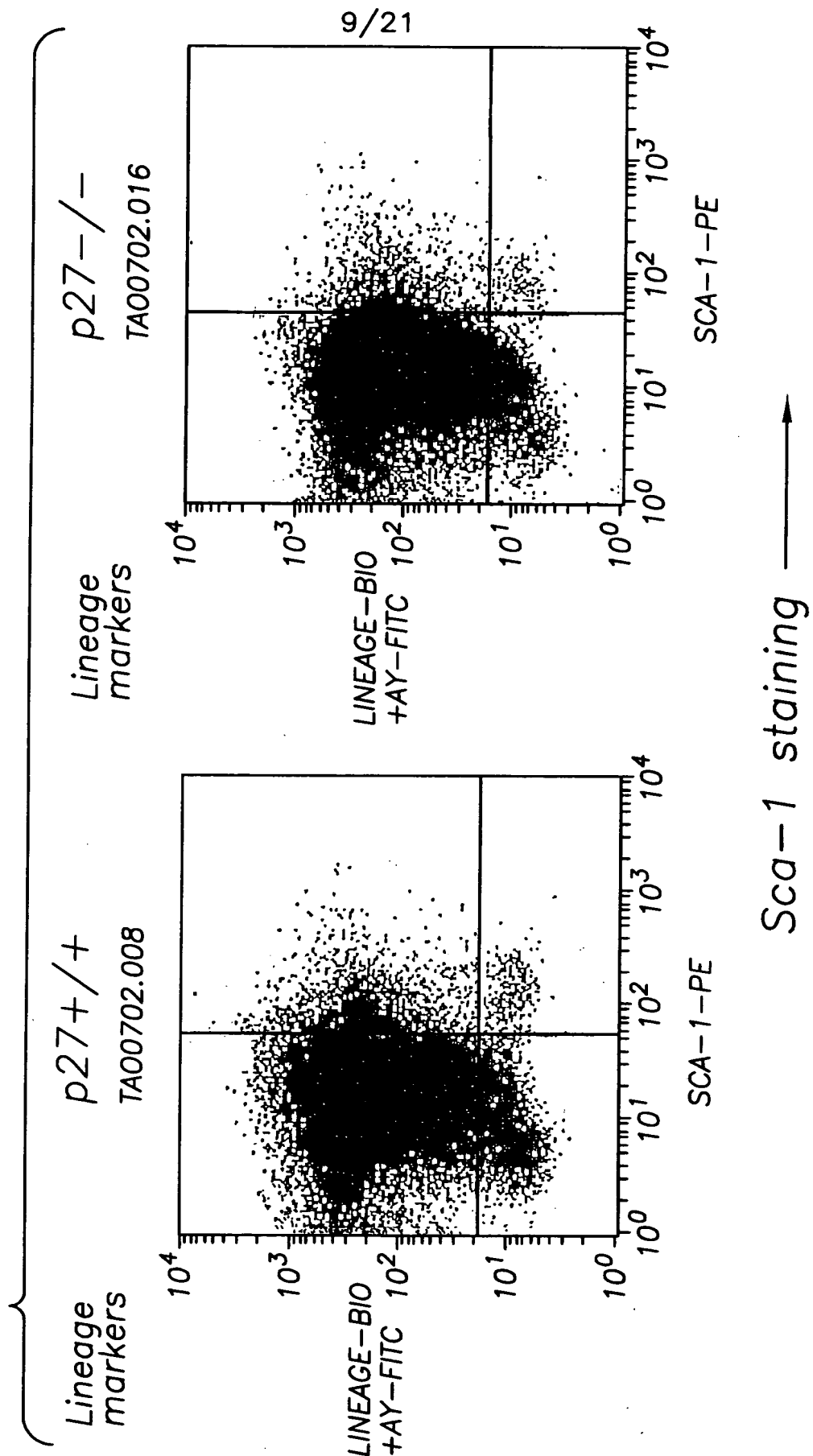


FIG. 6b



103100 030000

FIG. 7a-1

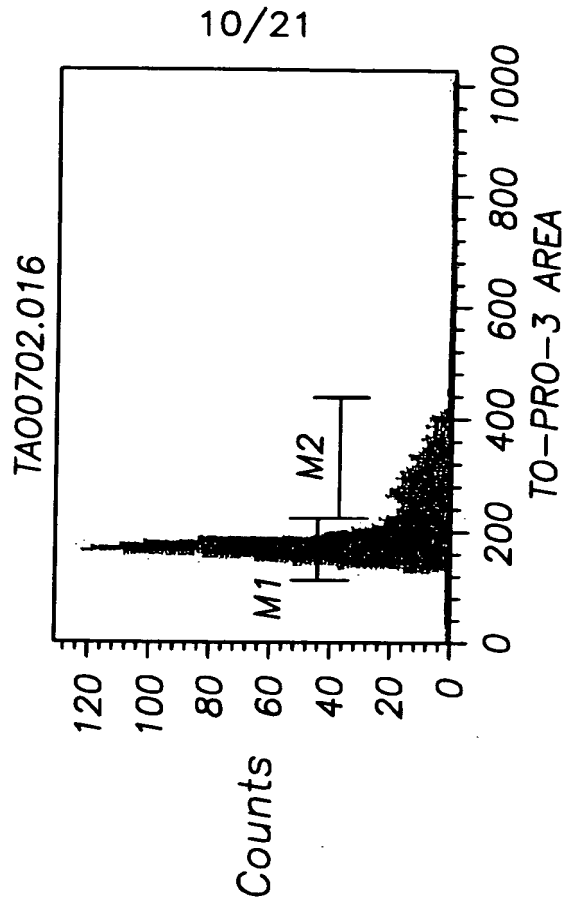
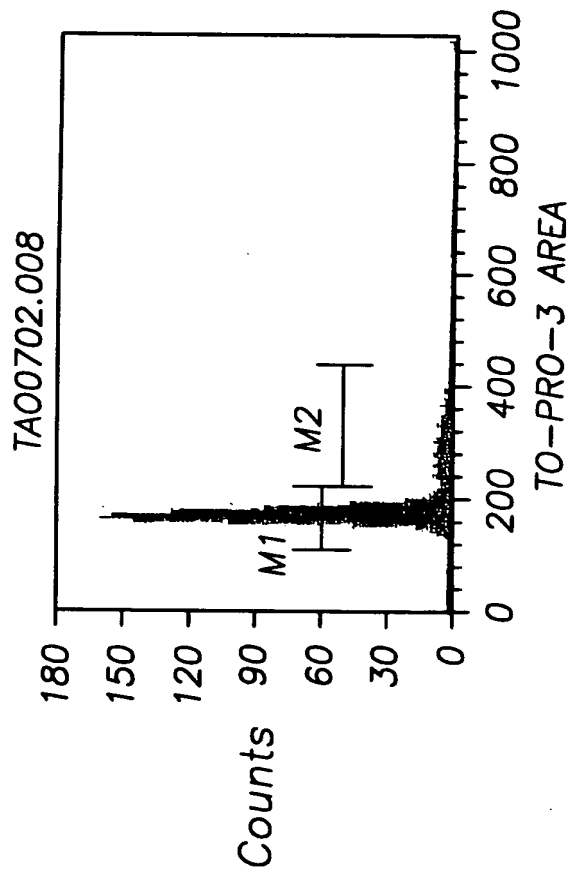


TOP SECRET

FIG. 7a-2

Sca-1+Lin+

Sca-1+Lin+



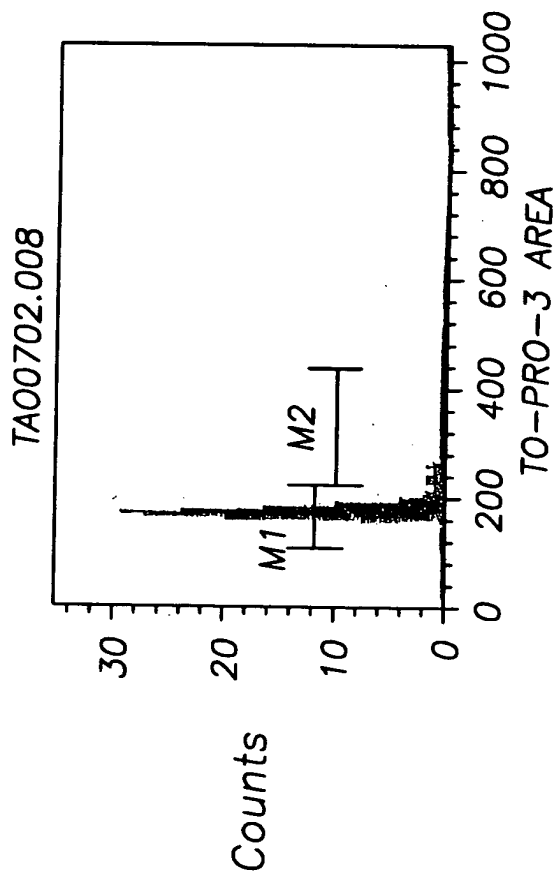
To-pro-3 staining →

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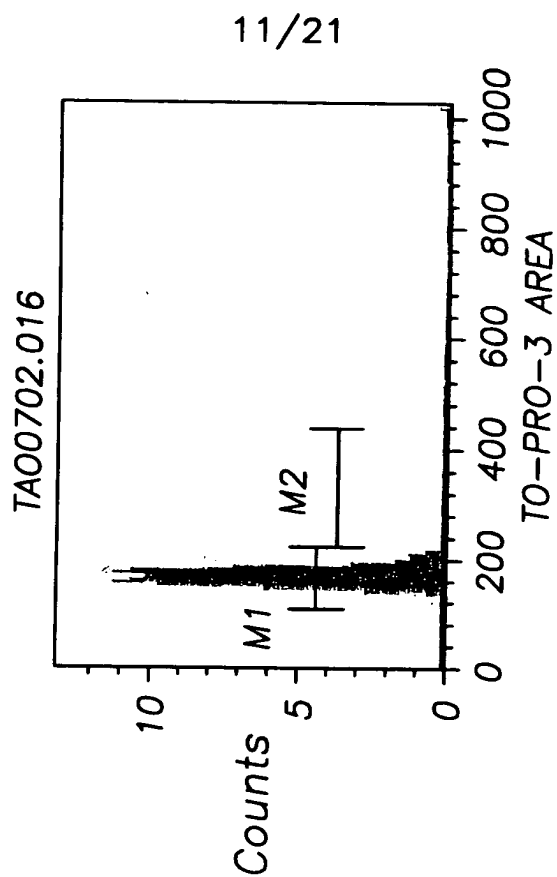
109140" 49960660

FIG. 7a-3

Sca-1+Lin-



Sca-1+Lin-



To-pro-3 staining →

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FIG.7b

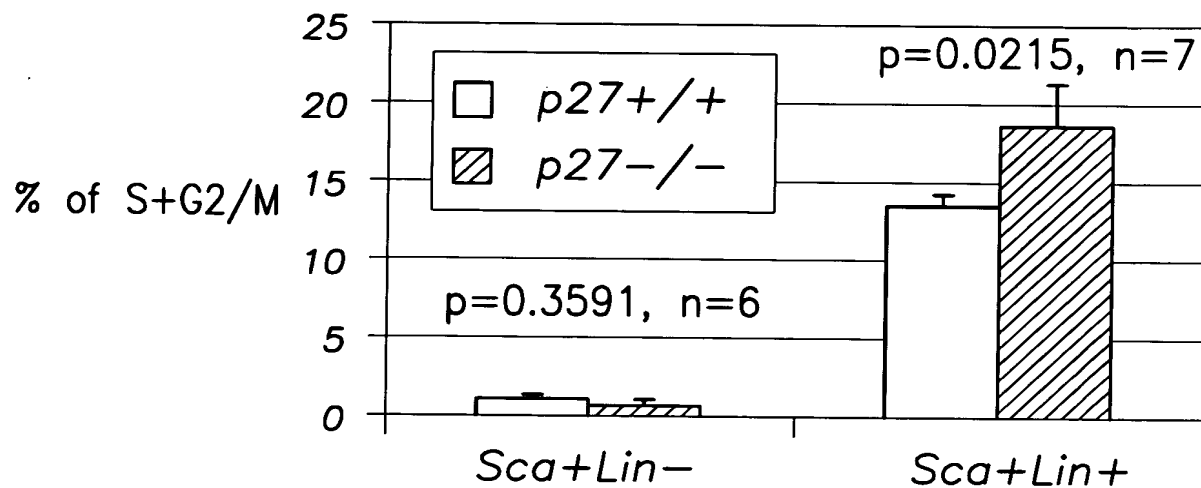


FIG.7c

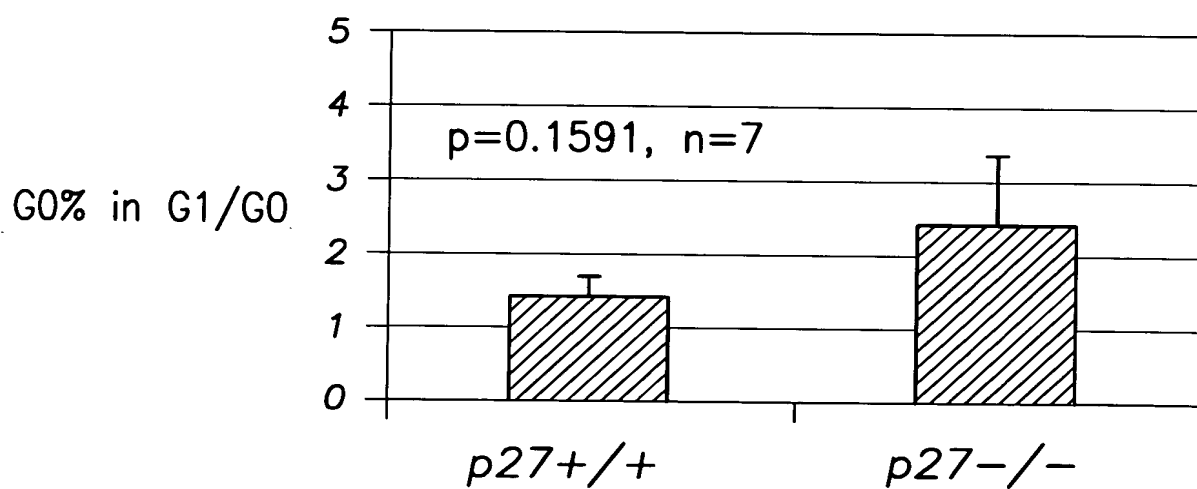


FIG.8

Reduction %

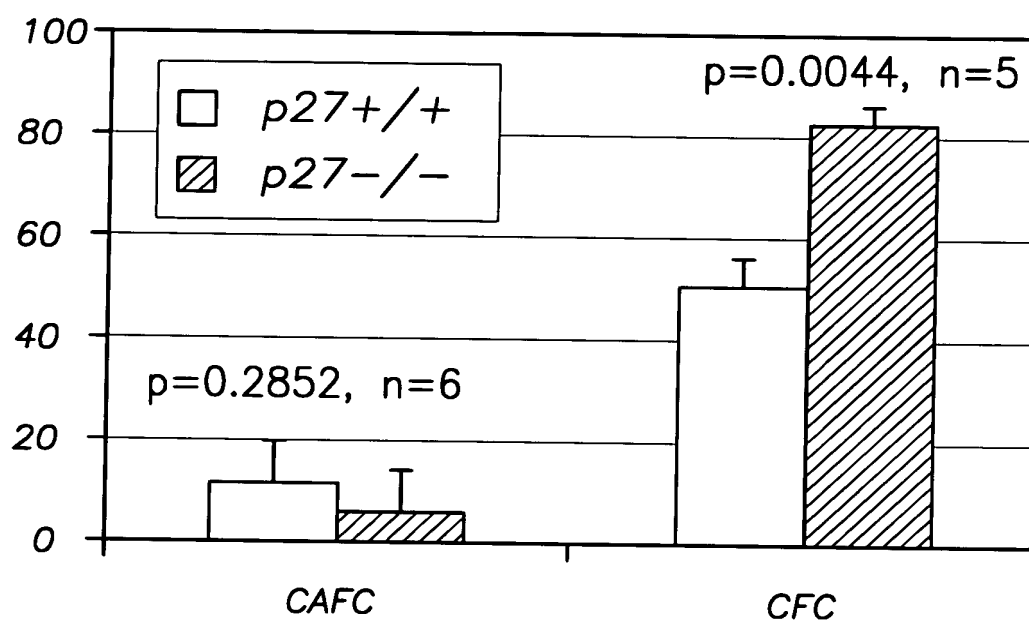


FIG.9a

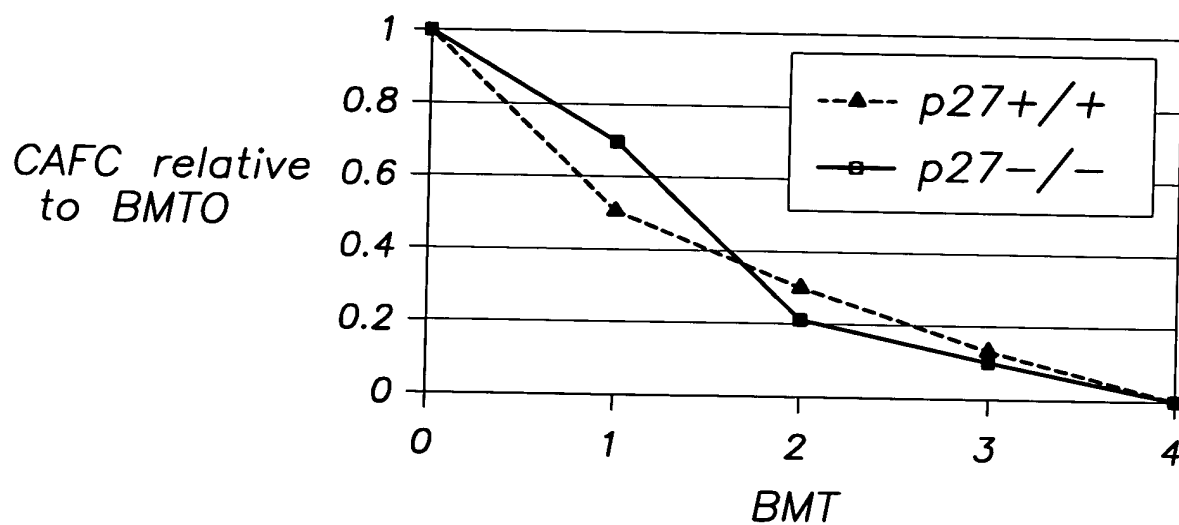


FIG.9b

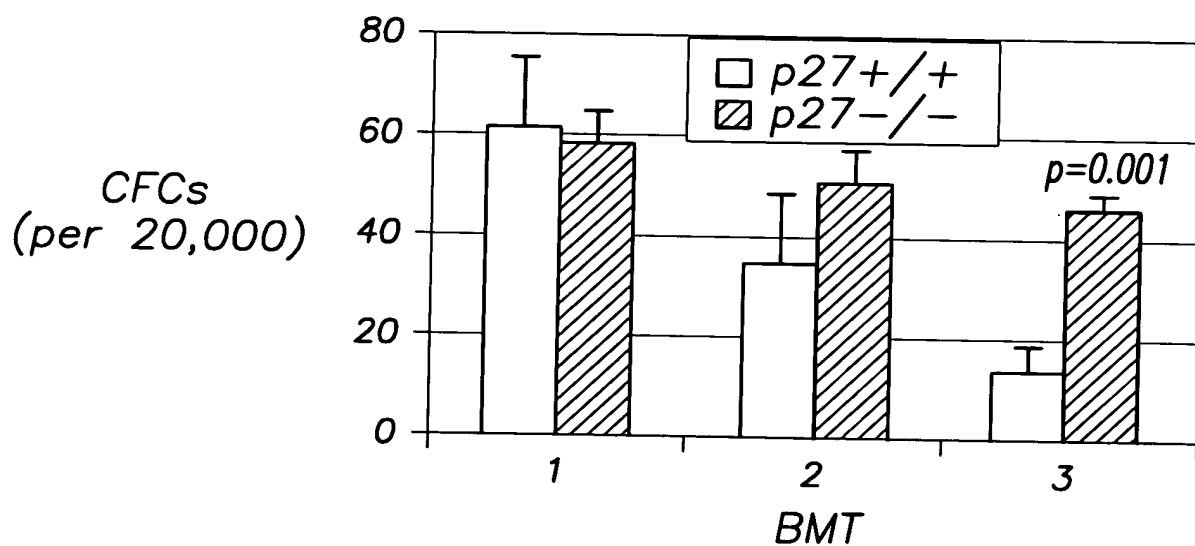


FIG. 9c

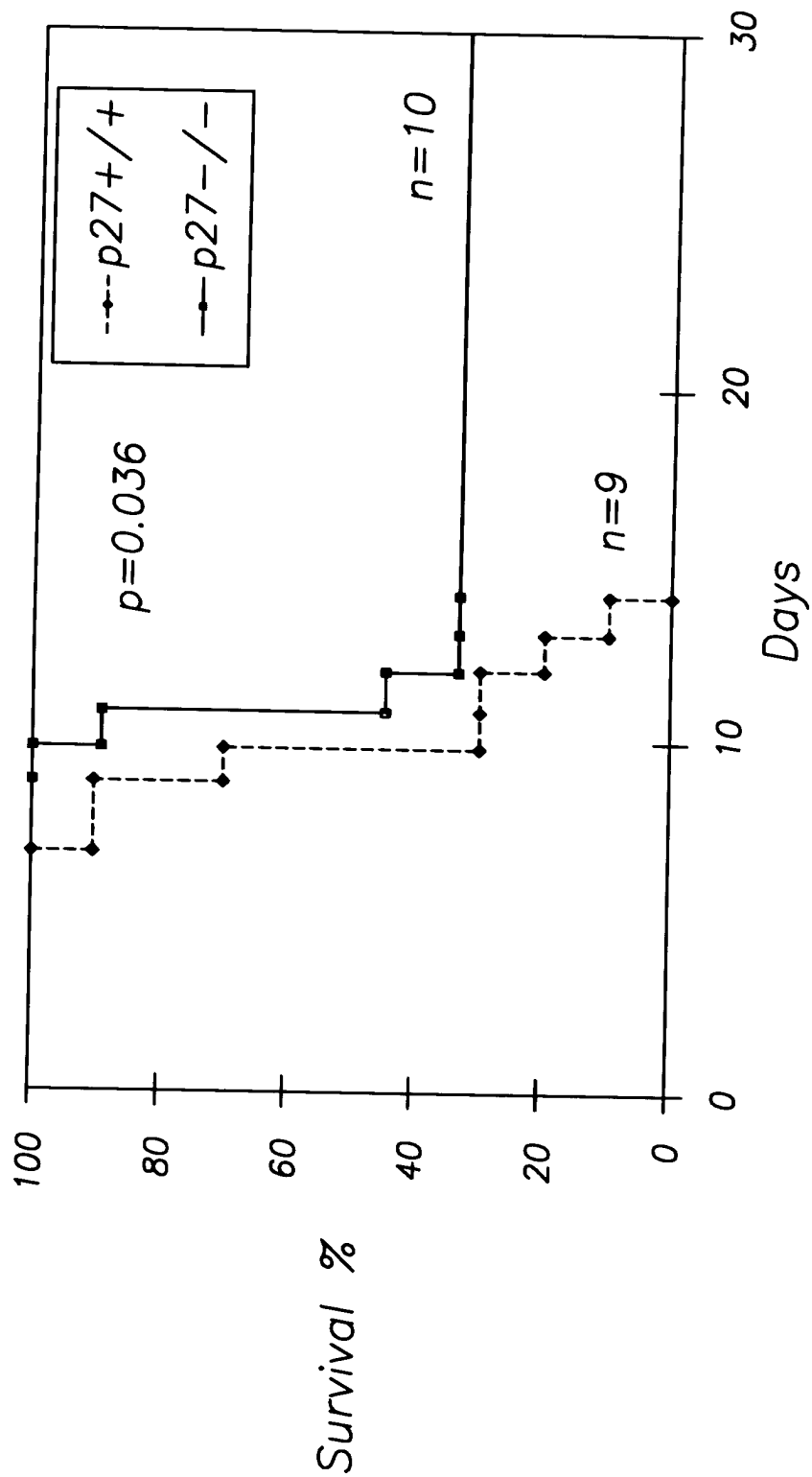


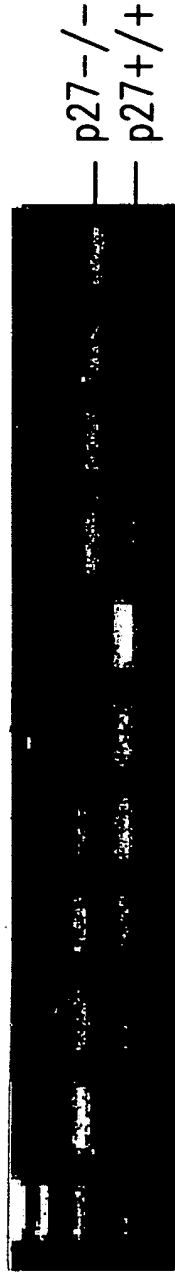
FIG. 10a

p27-/-%/p27+/+%

100/0 80/20 60/40 40/60 20/80 0/100

Mouse#

1 2 3 4



PB cells

p27-/-%/p27+/+%

100/0 80/20 60/40 40/60 20/80 0/100

Mouse#

1 2 2



BM cells

FIG. 10c

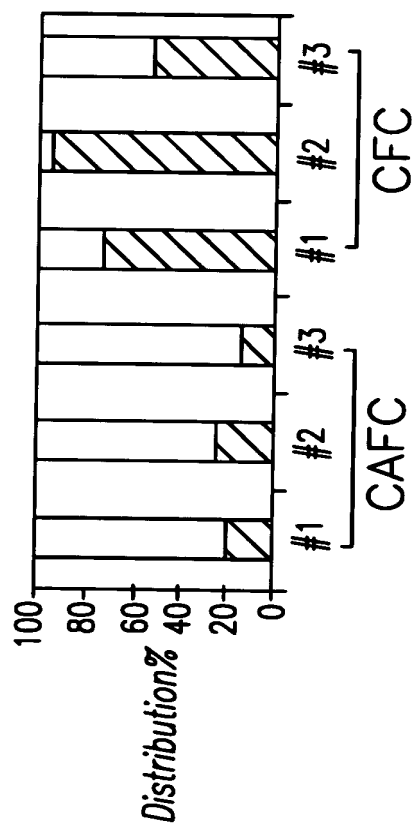


FIG. 10d

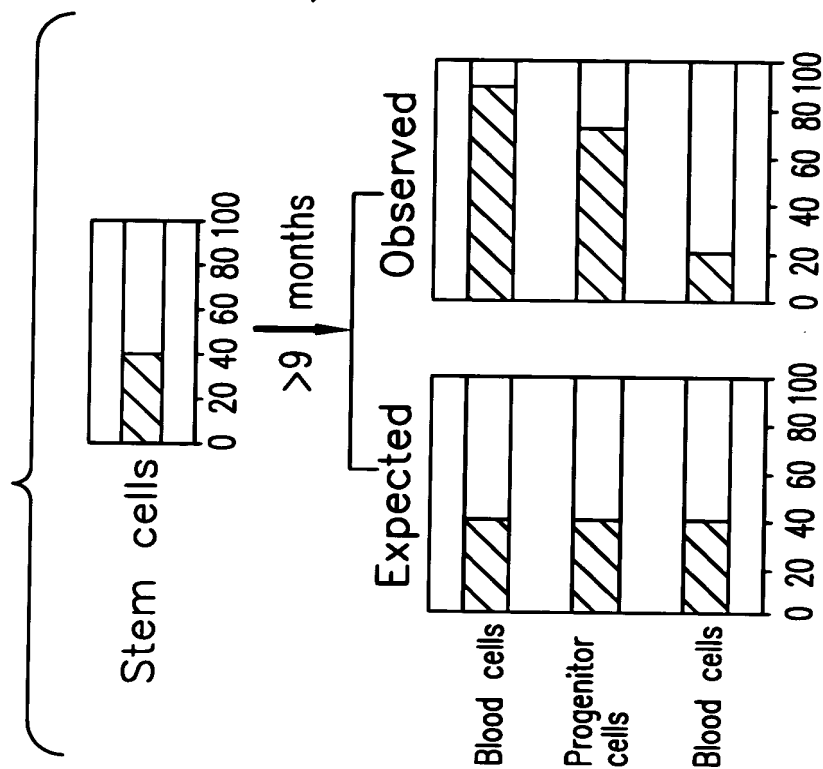


FIG. 11a

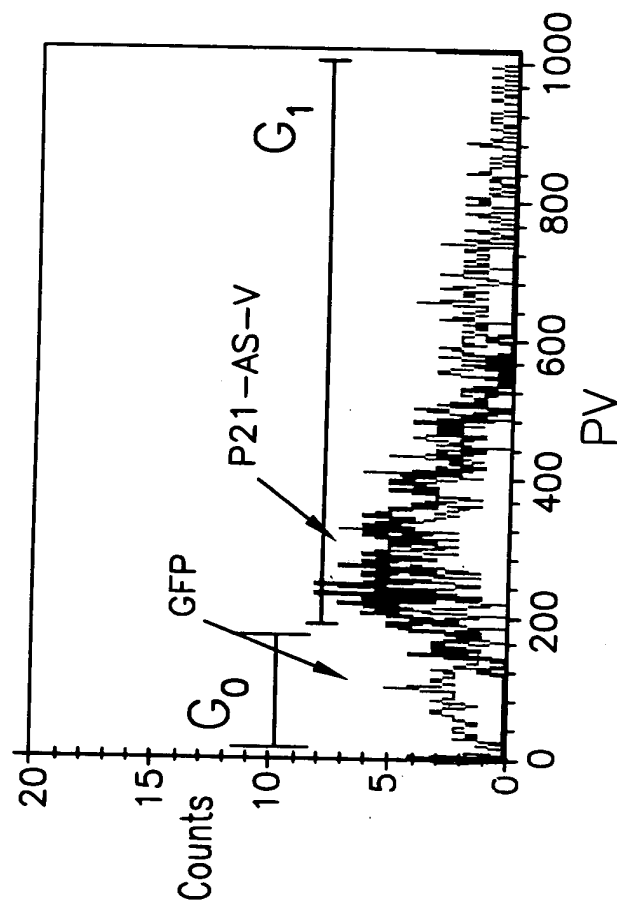


FIG. 11b

Percentage of G_0 cells in the CD34+38- subpopulation of transduced CD34+ cord blood cells

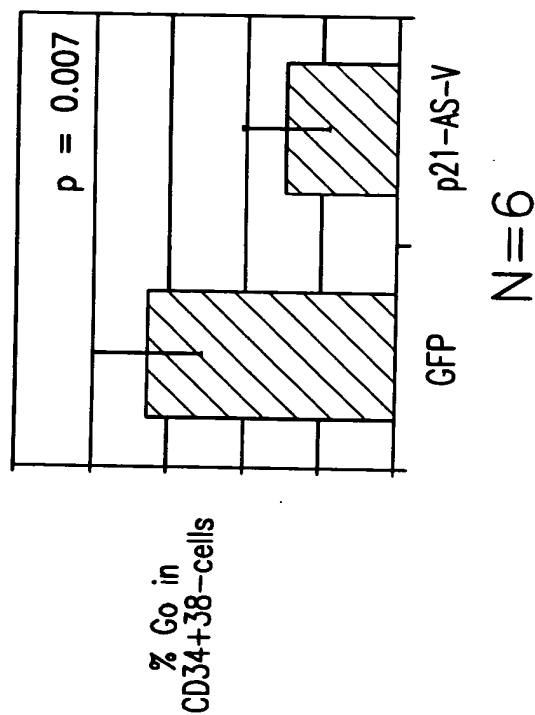


FIG. 12a

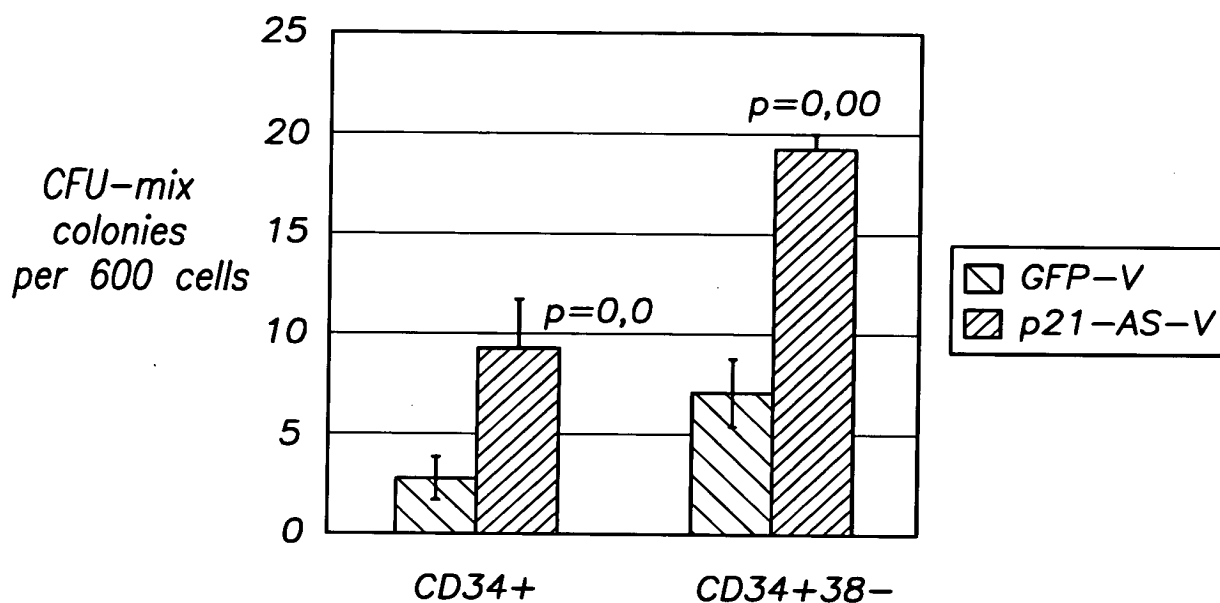
CFU-mix colonies of transduced progenitor cells

FIG. 12b

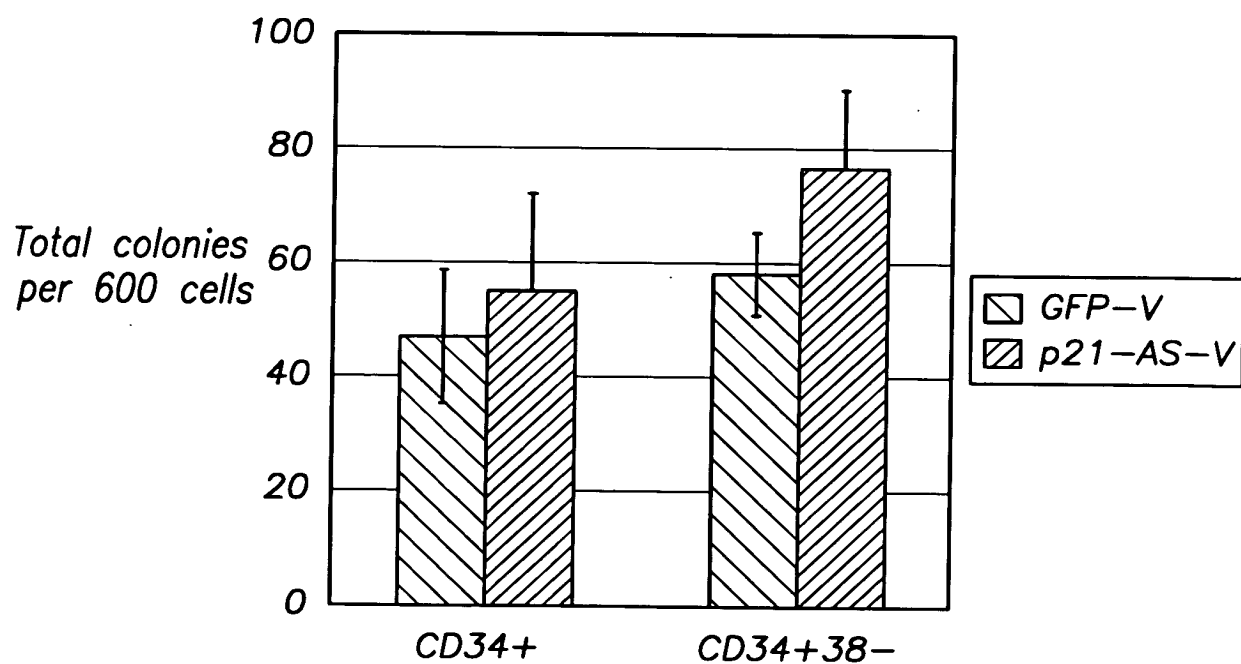
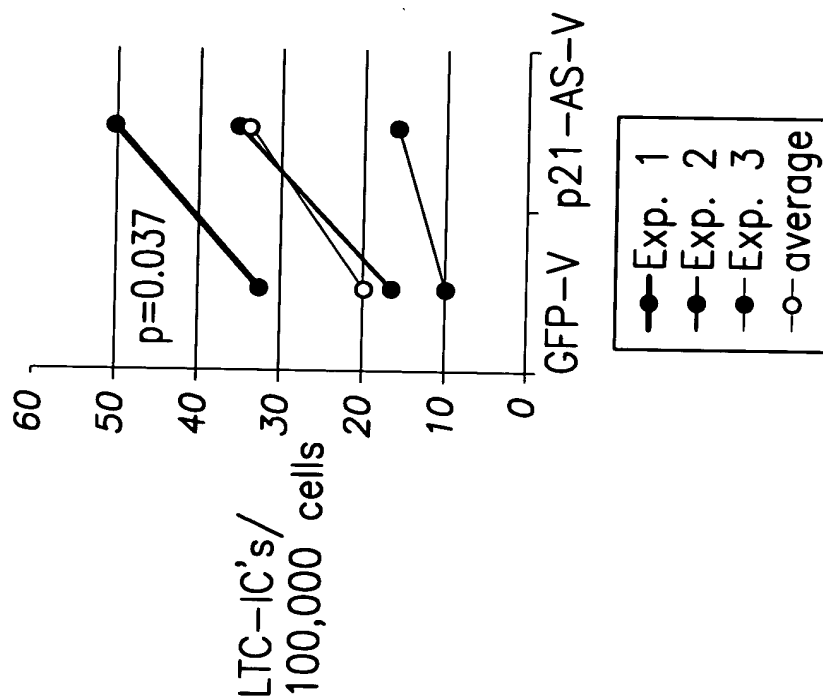
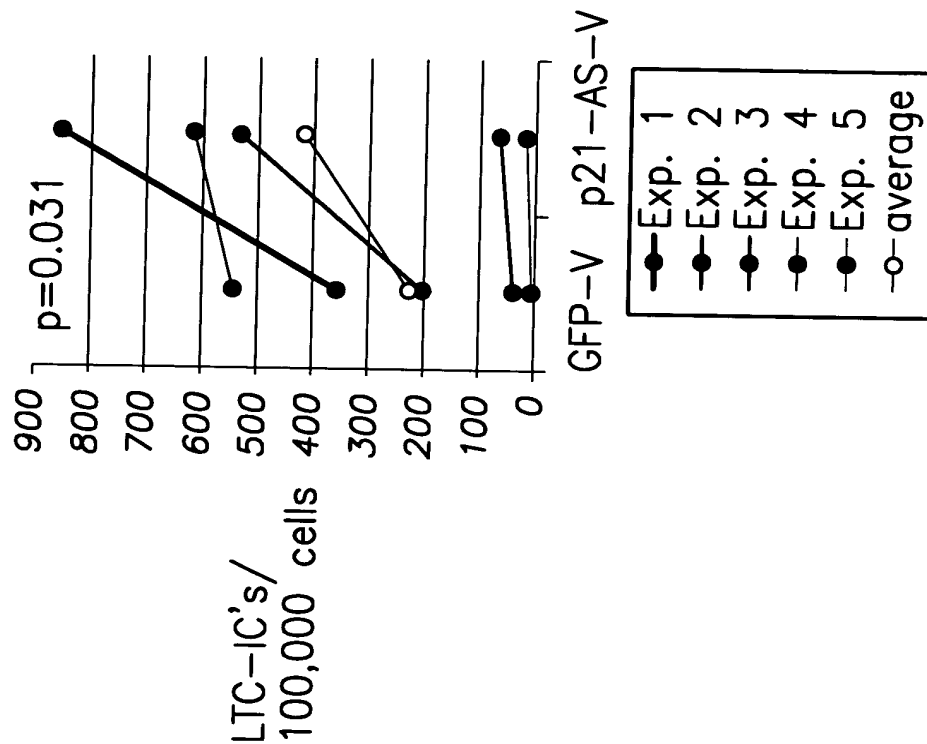
Total colony number of transduced progenitor cells

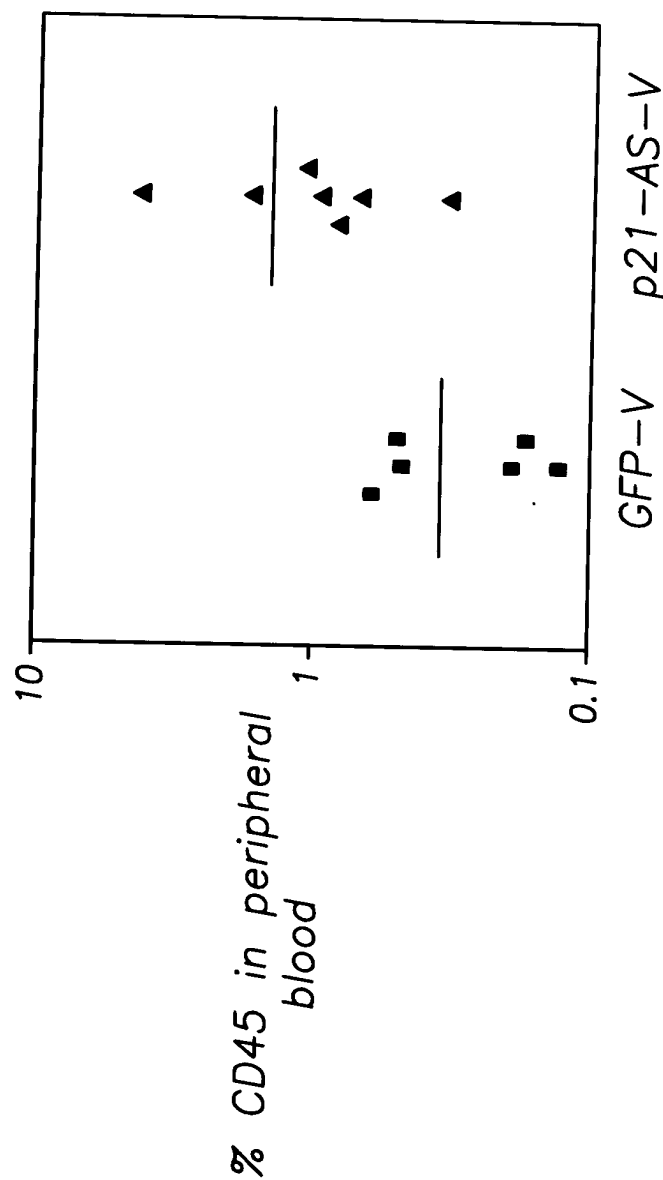
FIG. 13

LTC-IC assay p21-AS
transduced CD34+38- cells

p21^{Cip1} anti-sense enhances human
CD34⁺ cell engraftment of NOD/SCID mice

FIG. 14

SRA4 p21 week4 pB



p21-AS-V vs. GFP-V
p=0.04 t-test
p=0.0041 Mann-Whitney